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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,289	11/25/2003	Philippe Nathan Bamberger	051005-1020	9091

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP  
100 GALLERIA PARKWAY, NW  
STE 1750  
ATLANTA, GA 30339-5948

EXAMINER

AZARIAN, SEYED H

ART UNIT PAPER NUMBER

2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/722,289

Applicant(s)

BAMBERGER ET AL.

Examiner

Seyed Azarian

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2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/29/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartman et al (U.S. patent 7,146,031) in view Katakura (U.S. patent 5,953,500).

Regarding claim 1, Hartman discloses a method of separating and collating mammogram records, said method including the steps of;

scanning at least one radiological film mammogram relating to a patient thereby to obtain at least one digitized image of the at least one film mammogram (see abstract, digital films are processed, anatomic features are used to detect and identification of a film series);

storing the at least one digitized image in a memory (column 6, lines 49-66, digital medical imaging system are stored in a digital image storage system);

providing and scanning a separator film having identifiable features which when scanned identify the film as a separator film, and including positioning the separator film immediately after the at least one radiological film of a patient (column 2, line 55 through column 3, line 5, providing stack of 100 films would contain many cases fro different patient to radiologist, also Fig. 4, column 5, lines 24-36, scanning unit 404, processing

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unit 302, and computer 406, , they can also be provided "separately" or in other combinations. Processing unit comprises a computer-based system for detecting anatomical abnormality, further column 9, lines 22-36, provide method for separating case (films associated to one patient) from another case in an automatic, computerized wav);

and repeating said steps of scanning, storing, and providing for the remaining film mammograms of N patients in a film mammogram queue, where  $N > 1$  (column 12, line 65 through column 13, line 22, refer to repeating);

wherein the digitized images generated subsequent to each scanned separator film are stored separately from the stored digitized images obtained from prior scanned film mammograms (column 7, line 50 through column 8, line 14, all mammogram x-ray that was taken different time, can be stored in digitized form in CAD computer memory).

However Hartman discloses column 5, lines 24-36, scanning unit 404, processing unit 302, and computer 406, they can also be provided "separately" or in other combinations. Processing unit comprises a computer-based system for detecting anatomical abnormality, and column 7, line 50 through column 8, line 14, all mammogram x-ray that was taken different time, can be stored in digitized form in CAD computer memory, but does not explicitly state "collating mammogram records". On the other hand Katakura in the same field of medical, teaches (column 6, lines 11-24, the sorting information such as the patient ID number is for sorting medical images, and collation code described below is a code for distributing a plurality of sheets of films, to a plurality bins and stacking a plurality sheet film carrying different medical image).

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Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Hartman invention according to the teaching of Katakura because it provides medical images, which the recording media can be properly sorted and stored that can be carried out in smaller workstation, which can easily be implemented to an image scanning device such as MRI or CT system).

Regarding claim 2, Hartman discloses column 2, line 48 through column 3, line 5, the present invention provide large number of films typically on the order of 100, can be stacked together and fed into the system at one time in a manner similar to high capacity paper copying machines, but does not explicitly state "step of printing out". On the other hand Katakura in the same field of medical, teaches (Fig. 2, column 4, lines 7-26, the sorting information is information which is added as information necessary for printing when the command code 16 is print or reprint).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Hartman invention according to the teaching of Katakura because it provides the sorting information output from laser printer as the latter visible image for better accuracy.

Regarding claim 3, Hartman discloses a method according to claim 2 wherein said step of printing provides a printout which contains location markers indicating anatomical abnormalities found on a mammogram (see claim 2, also column 8, lines 31-60 referred to labeling and marking).

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Regarding claim 5, Hartman discloses a method according to claim 2 wherein said step of printing a printout is effected after said scanning of a separator film in said step of providing (see claim 2, also column 4, lines 15-31, scanning).

Regarding claim 6, Hartman discloses a method according to claim 2 wherein said step of repeating also includes repeating said step of printing (column 12, line 65 through column 13, line 22, refer to repeating).

Regarding claim 7, Hartman discloses a method according to claim 2 further includes a step of inputting wherein patient identifier data are entered (column 2, lines 55-66, large number of films (different patient) are fed into a digitizer, also Fig. 10, column 9, lines 49-60, identification label with a specific patient is paced on the sheet).

Regarding claim 8, Hartman discloses a method according to claim 7 wherein said step of inputting is affected prior to said step of providing and scanning (column 3, lines 47-60).

Regarding claim 10, Hartman discloses a method according to claim 7 wherein said step of repeating also includes repeating said step of inputting (column 12, line 65 through column 13, line 22, refer to repeating).

Regarding claim 11, Hartman discloses a method according to claim 7 wherein said step of inputting includes entering identifier data for every patient having a set of mammograms in the mammogram queue prior to beginning said step of scanning and wherein said step of repeating includes repeating said steps of scanning, storing, providing, and printing (see claim 2, also Fig. 1, column 3, lines 59 through column 4, line 4, identification of suspicious lesions in mammograms).

Regarding claim 23, Hartman discloses a workstation system for collating radiological film mammograms and other physical records, said system including: a scanner operative to receive and digitize radiological film mammograms from a patient and a separator film carrying identifiable features for identifying the film as a separator film; a collating station for receiving the scanned films from said scanner (see claim 1, also Fig. 1, column 4, lines 32-49, viewing station 104).

Regarding claim 24, Hartman discloses a system according to claim 23 further including a display for displaying the digitized images of scanned radiological film mammograms received from said processing means, which is in electronic communication with said display (Fig. 17, column 3, lines 40-42, displaying digitized images in a preferred or predetermined order).

Regarding claim 29, Hartman discloses a separator film according to claim 28 wherein the at least one identifiable characteristic is chosen from among the following, graphical indicia; a marker; a textured edge; and a serrated edge (column 8, lines 31-60 referred to labeling and marking).

Regarding claims 4, 9, 12 and 13 it recites similar limitation as claims 1, 2, 3, 8, are similarly analyzed.

Regarding claims 14, 15, 16, 17 and 18, it recites similar limitation as claims 3, 4, 5, 6 and 7, are similarly analyzed.

Regarding claims 19, 20, 21 and 22, it recites similar limitation as claims 8, 9, 10 and 11, are similarly analyzed.

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Regarding claims 25, 26, 27, 28 and 30, it recites similar limitation as claims 1, 2, 3 and 7, are similarly analyzed.

### Other prior art cited

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(U.S. patent 6,678,703) to Rothschild et al is cited for medical image management system and method.

(U.S. patent 6,434,262) to Wang is cited for computer-aided diagnosis system and method.

(U.S. patent 6,227,531) to Guerrero et al is cited for job separation process system and method for distributing print jobs.

(U.S. patent 5,886,359) to Bringley et al is cited for X-ray detector, detection assembly, and method.

### **Contact Information**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian  
Patent Examiner  
Group Art Unit 2624  
February 5, 2007

A handwritten signature in cursive script, reading "Seyed Azarian", positioned below the typed name and date.